



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/943,956

08/31/2001

Harry Tang

00982

2042

26285

7590

04/13/2006

KIRKPATRICK & LOCKHART NICHOLSON GRAHAM LLP
535 SMITHFIELD STREET
PITTSBURGH, PA 15222

EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,956

Applicant(s)

TANG ET AL.

Examiner

Andrew C. Lee

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-24, 26, 28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 13-24, 26, 28 and 30 is/are allowed.
- 6) ☐ Claim(s) 1- 4, 6-9, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) 5, 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the communications filed on 03/03/2006, some discrepancies had been detected in the specification and the amended claims. Further reconsideration of re-examining the application is needed. Hence, the finality of the rejection of the last Office action is, therefore, withdrawn.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Referring to Page 2 of the specification, line 4, <http://www.telebyteusa.com/dslprimer/dslch3.htm>; and, line 13, <http://www.telebyteusa.com/dslprimer/dslch3.htm>. Deleting the embedded hyperlink is required.

Claim Objections

3. Claims 20, 26 are objected to because of the following informalities:

- Regarding claim 13, the term “delaying for 10-15 seconds” is needed to be verified. That is how this delay is obtained (based on the measurement or test result?) and defined in the specification or in the claim.
- Regarding claim 20, semicolon is missing after the term GUI operator (line 5).
- Regarding claim 26, the term “claim 25” is required to be modified, since claim 25 has been cancelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6, 31, 32, 2, 4, 8, 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Gudmundsson et al. (US 6870901 B1).

Regarding claims 1, 6, 28, 31, 32, Gudmundsson et al. disclose the limitation of a system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch (Fig.12, recited “DSL system” as a system for an ADSL access network, see column 5, 27 – 31), comprising: a network management system (column 5, lines 33 – 42, recited element 1210 Network Management System) in communication with an element management system (column 5, lines 33 – 42, recited element 1220 Element Management System) that is in communication with the DSLAM switch (column 5, lines 33 – 42, recited distributing control information from NMS to the DSLAMs as in communication with the DSLAM switch), the network management system including a control algorithm (column 8, lines 37 – 45, column 16, lines 63 – 67, recited “supervisory programs” as control algorithm) for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore (column 16, line 63, recited the first (highest) computational level as a first semaphore) and a second semaphore

Art Unit: 2664

(column 16, line 67, recited the next computational level as a second semaphore); wherein the first controls a first provision request flow at the element management system level (column 16, lines 63 – 67, recited “these supervisory programs interacting with DSLAM” as the first controls a first provision request flow at the element management system level) and the second controls a second provision request flow at the DSLAM switch level (column 17, lines 1 – 7, recited : DSLAM managing one or more line cards (next highest computation level) as second controls a second provision request flow at the DSLAM switch level).

Regarding claim 2, Gudmundsson et al. disclose the limitation of the system according to claimed further comprising the element management system in communication with the DSLAM switch (column 5, lines 33 – 42, recited element 1220 Element Management System, column 5, lines 33 – 42; recited distributing control information from NMS to the DSLAMs as in communication with the DSLAM switch).

Regarding claim 4, Gudmundsson et al. disclose the limitation of the system according to claimed further comprising a first object defined by the network management system for representing that a GUI operator is requesting activity on the DSLAM switch (column 19, lines 4 – 11, recited events are collected and compiled into events lists and event manager resided on a DSLAM” as activity on the DSLAM switch).

Regarding claim 8, Gudmundsson et al. disclose the limitation of the system according to claim 6, further comprising a plurality of means for multiplexing an ADSL subscriber line in communication with the means for managing an ADSL access network element (Fig. 12, element 1250 CPE, as ADSL subscriber line, column 5, lines 45 – 12).

Regarding claim 9, Gudmundsson et al. disclose the limitation of the system according to claimed wherein the system includes the means for managing the ADSL access network further comprising a first object whose attribute is defined by the means for managing the ADSL access network for representing that a GUI operator is requesting activity on the means for multiplexing the ADSL subscriber line (column 8, lines 64 – 67; recited “ the report” as first object).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudmundsson et al. (US 6870901 B1) in view of the Article “Efficient Implementation of Semaphores in Controller Area Networks” by Cena et al., Industrial Electronics, IEEE Transactions on, Volume 46, Issue 2, April 1999, PP417-428.

Regarding claims 3, 7, Gudmundsson et al. disclose the limitation of the system according to claimed further comprising at least one of the following: a plurality of DSLAM switches in communication with the element management system (Fig.12, recited “DSL system” as a system for an ADSL access network, see column 5, 27 – 31, column 5, lines 33 – 42, recited element 1210 Network Management System). Gudmundsson et al. do not disclose expressly a semaphore count register in communication with the control algorithm. The Article by Cena et al. discloses the limitation of a semaphore count register in communication with the control

Art Unit: 2664

algorithm (page 420, third paragraph, lines 18 – 22; page 421 – 422, Fig. 3, third paragraph, lines 19 – 29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gudmundsson et al. to include a semaphore count register in communication with the control algorithm such as that taught by the Article (by Cena et al.) in order to provide the application designer with a powerful support with which to synchronize the concurrent activities and offers a high degree of reliability and efficiency at the same time.

Allowable Subject Matter

8. Claims 11, 20, 28 are allowed.

Prior art of record does not disclose, in single or in combination, the limitations of delaying when the DSLAM level semaphore is not available; determining whether a batch provision request acquired a semaphore; and delay for a predetermined period when the batch provision request does not acquire the semaphore in combination with other limitations of claims.

Additionally, all of the further limitations in claims 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 26, 30 are allowable since the claims are dependent upon the independent claims.

Claims 5, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2664

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments


10. Applicant's arguments with respect to claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 30, 31, 32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600